

Technical Data Sheet



THICK FILM MATERIALS

Product Type: Conductors

Product Name: C8729



Plateable Silver Conductor

Description

C8729 is a Pb, Cd and Ni free plateable silver conductor that yields a smooth, dense film. It exhibits high adhesion on alumina substrates. C8729 can be multiple fired without any loss of performance. C8729 is an excellent choice for electrolytic plating applications, such as copper, nickel, tin, etc.

Key Benefits

- Excellent fired film density
- Low resistivity
- High adhesion
- High speed printing
- Feed through hole application
- Pb, Cd and Ni free

Recommended Processing Guidelines

Printing

280 mesh stainless steel screen
0.5 mil emulsion

Printing Speed

Up to 7 in/sec

Coverage

80 cm²/g at 12 µm fired film thickness

Drying

Allow to level at room temperature for 5 – 10 minutes
150 °C for 10 minutes

Firing

850 °C peak temperature
Dwell time of 10 – 12 minutes
Total cycle time 36 – 60 minutes

Film Thickness:

Wet:	32 – 34 µm
Dried:	22 – 26 µm
Fired:	10 – 15 µm

Thinner:

RV-372

Warranty:

Material guaranteed to meet specifications for 6 months from date of shipment.

Storage:

Store in a dry location at 5 – 25 °C.

DO NOT REFRIGERATE.

Allow paste to come to room temperature prior to opening. Spatulate well before using, as settling may occur during storage.

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Typical Properties

Resistivity

< 2.5 mΩ/□ at 12 μm fired film thickness

Adhesion (after plating)

2 x 2 mm pad

Initial:	≥ 10.0 lbs
Aged:	≥ 8.0 lbs
(500 hours @ 150 °C)	
500 thermal cycles	
(-55 °C to +125 °C):	≥ 10.0 lbs

Al Wire Bondability

1.25 mil

Initial:	> 20.0 g
500 hours @ 150 °C:	> 10.0 g

*Note: failure mode: wire breaks

Initial:	> 600.0 g
500 hours @ 150 °C:	> 550.0 g

*Note: failure mode: wire breaks

Solderability

Sn62/Pb36/Ag2 at 230 °C

10 second dips, RMA flux

	#of Dips	% Line Loss
	1	10 %
After plating	6	5 %

Coverage

80 cm²/g at 12 μm fired film thickness

Viscosity

60 – 100 Kcps Brookfield HBT

SC4 – 14 spindle, 6R utility cup at 10 rpm, 25 °C

Solids

81.5 ± 1.0 %

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